DUCK CREEK

Golden Anniversary Renovation

Working With Flood Waters and Giving Them Room to Breathe

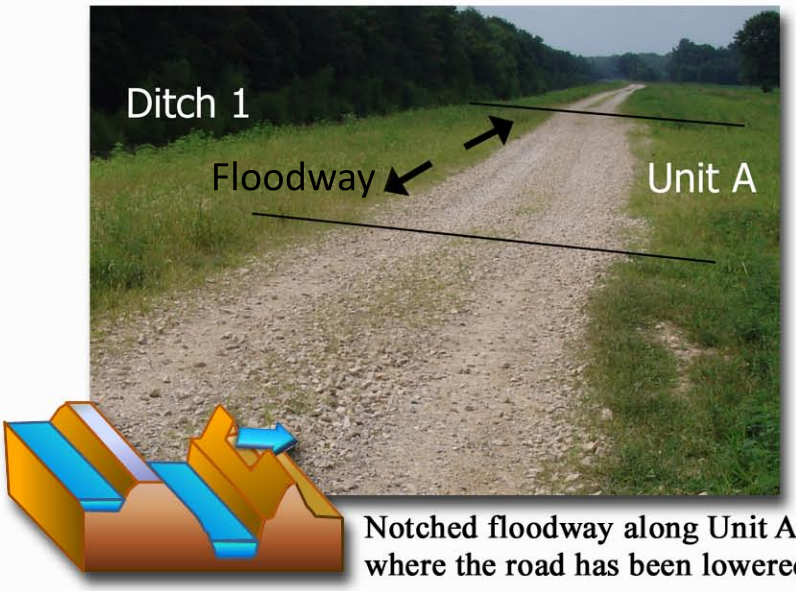
For the same reasons we installed the spillways this year along the borders of Pool 3, we will be cutting the roads/levees down in several locations to allow large flood events to spread out across the landscape. These floodways take advantage of the lay of the land and historic drainage patterns, which are still evident during large flood events despite our intricate drainage network.

The floodway locations correspond to old slough channels and drainages which are evident from the topography data (lidar). These spots are where water "wants" to go and are locations that are often more suspect to levee failure. By making these cuts broad the water will be less constricted and therefore have lower velocities. Slower water has less energy and reduces the degree of erosion and deposition, which are the typical costly culprits of most floods.

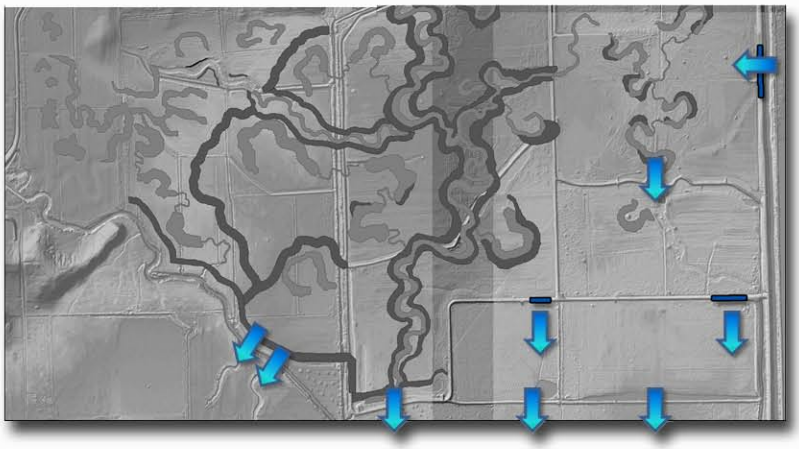
These floodways will only be cut down to 6 inches above full pool so that the water management within the impoundment will not be compromised. These structures will only function during extreme flood events, and therefore will not directly affect waterfowl hunting much at all.

By working with the system and allowing floods to occur on our "broader" terms, we can minimize the damages and increase the benefits. Not only will it provide flood relief to surrounding landowners, and minimize flood damages and maintenance costs, it also reinstates the periodic flooding that would typically occur in a bottomland swamp. The seasonal pulsing of water through habitats can benefit both plants and animals.

Despite extensive networks of levees and ditches, historic drainages still function during large events.



Notched floodway along Unit A where the road has been lowered.



The blue arrows indicate where floodways will allow water to flow out of the ditch, across Unit A and into Pool 8.